61



# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.

10/573,184

Confirmation No. 4929

Applicant(s)

Thomas HOFMANN et al.

Filed

November 1, 2006

Group Art Unit

3748

Examiner

Tu M. Nguyen

Docket No.

R.305990

Customer No.

02119

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

09/22/2008 JADDO1

00000082 072100 1

105/3184

41 FC:1846

180.00 DA

Date: September 19, 2008

# INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97(c) REGARDING THE RELEVANCE OF THE CITED PRIOR ART

Sir:

The undersigned hereby requests that the prior art cited on the attached prior art statement be placed of record in the application file.

This citation of prior art is made under 37 CFR 1.97(c), since it is being filed after the mailing date of the Final Action, and is being accompanied by the fee of \$180 as set forth in 37 CFR 1.17(p).

The relevance of the prior art cited on the attached form PTO/SB/08a is as follows:

## JP 3-206314

The purpose of this invention is to improve the purifying efficiency of nitrogen oxide in exhaust by supplying a reducer from a reducer water solution passage to a nozzle through heating pipes, arranged on the inside of an exhaust pipe, and injecting a reducer water solution vaporized in the heating pipe from the nozzle. This aqueous ammonia injection

nozzle device 4, mounted on the upstream side from a catalytic reactor of an exhaust pipe 2, has a casing 24 mounted on the exhaust pipe 2, while an aqueous ammonia pipe 26 formed on the inside of the casing is connected to a tank, in which aqueous ammonia that is a reducer aqueous solution is accumulated, through a pipe 5. A needle valve 27 throttling the aqueous ammonia passage 26 and an accumulator 28 filled with gas of air or the like are provided in the casing 24. The aqueous ammonia passage 26 is connected to a box unit 29, whose interior serves as a vaporization expansion chamber 30, through heating pipes 25 arranged in the exhaust pipe 2, while gaseous ammonia heated and vaporized in the heating pipes 25 is injected into the exhaust pipe 2 from a porous nozzle 31.

#### JP 2000-54828

The purpose of this invention is to downsize and simplify an exhaust emission control device which utilizes powder urea as reduction agent. Powder urea A housed in a reduction agent storage chamber 12 of a reduction agent adding device 11 is heated in a heating/liquefying chamber 13, and liquefied. The resultant liquid urea is pressurized by a pump 14, adjusted and kept constant pressure by means of a pressure adjusting part 15, and added into an exhaust pipe 7 from an addition control valve 16. The liquid urea added into the exhaust pipe 7 is instantaneously evaporated by the heat of the exhaust gas to form reduction gas. The gas is flowed into an NOx catalytic converter 8 together with exhaust gas. NOx is reduced by the reduction gas on the selective reduction type NOx catalyst housed in the NOx catalytic converter 8.

### JP2002-364480

The purpose of this invention is to provide a fuel supply device capable of preventing damage to a member caused by a foreign matter coming into fuel. A bolt 61 is screwed with a lead in a same direction with a rotational direction of a cam shaft 20, fastened in predetermined torque, and can connect the cam shaft 20 and an inner rotor 63. When the foreign matter in the fuel is caught between gears of the inner rotor 63 and the outer rotor 64 and abnormal rotational force is generated in the cam shaft 20, the fastening force of the bolt 61 is defeated by the abnormal rotational force and a male screw part 62 of the bolt 61 is loosened from female screw parts 160 and 120, and connection between the cam shaft 20 and the inner rotor 63 is released. Thus, transmission of driving torque to the inner rotor 63 is shut off, and breakage of the inner rotor 63 and the outer rotor 64 can be prevented. Therefore, fuel leakage caused by a broken piece generated by breakage of the member can be prevented and reliability can be improved.

#### JP 2003-239727

The purpose of this invention is to provide a NOx reduction catalyst device which enhances a NOx purification rate by activating and evaporating a reducing agent even in a short distance. Two reducing agent spraying ports 5A and 5B are arranged in an exhaust pipe passage 13 so as to be perpendicular to a flowing direction of an exhaust gas and toward a center of the exhaust pipe passage 13. At this time, the reducing agent spraying ports 5A and 5B are arranged at approximately equal interval in a peripheral direction of the exhaust pipe

Application No. 10/573,184

passage 13. When the reducing agent is sprayed on the exhaust pipe passage 13 in which the exhaust gas flows, the reducing agent sprayed from the opposite spraying ports 5 collide with each other and are made to be minute particles. Accordingly, the reducing agent is efficiently activated and evaporated by being strongly affected by an exhaust gas temperature, whereby NOx is excellently purified in the NOx reduction catalyst device arranged to a downstream side.

#### WO 03/064834

This invention relates to a fuel reformer is operated in one mode of operation to generate and supply a particular quantity and/or composition of reformate gas to a first component such as a NOx trap, and then is operated in a different mode of operation to generate and supply and different quantity and/or composition of reformate gas to a different component such as a soot particulate filter. In a similar manner, the fuel reformer is operated in one mode of operation to generate and supply a particular quantity and/or composition of reformate gas to a fuel cell, and then is operated in a different mode of operation to generate and supply and different quantity and/or composition of reformate gas to an emission abatement device. A method of operating a fuel reformer is also disclosed.

The Commissioner is hereby authorized to charge payment of the fee of \$180, or any/all fees associated with this communication to Deposit Account 07-2100.

Further examination of this application is respectfully requested.

Respectfully submitte

Registration No. 3

Attorney for Applicant(s)

GREIGG & GREIGG, P.L.L.C. 1423 Powhatan Street Suite One Alexandria, VA 22314

Tel: 703-838-5500 Fax: 703-838-5554

Customer No. 02119

REG/qmh
Enclosures
J:\Bosch\R305990\IDS 1.97(c) after Final Action.wpd